

CLAIMS

What is claimed is:

1           1.     A scanner comprising:  
2           a transparent scanning window;  
3           a housing, the housing including a first side supporting the scanning  
4 window and a second side opposite the first side;  
5           a scanning array movable in the housing relative to the scanning window  
6 along a scanning path, the scanning array generally facing the first side;  
7           a light source movable with the scanning array, the light source generally  
8 facing the first side; and  
9           a calibration target supported by the housing within the scanning path,  
10 the calibration target generally facing the second side, in operation.

1           2.     A scanner in accordance with claim 1 wherein the scanning target  
2 is supported inside the housing.

1           3.     A scanner in accordance with claim 1 wherein the scanning array  
2 is a color capable scanning array.

1           4.     A scanner in accordance with claim 3 and further comprising a  
2 monochrome printer commonly housed with the scanner in the housing.

1           5.     A scanner in accordance with claim 1 wherein the target is a color  
2 target.

1           6.     A scanner in accordance with claim 1 wherein the target is a black  
2 target.

1           7.     A scanner in accordance with claim 1 wherein the target is a color  
2 target, wherein the scanner further includes second and third color calibration  
3 targets supported inside the housing from the first side, proximate the scanning  
4 window and within the scanning path, the second and third calibration targets  
5 facing the second side, and wherein the scanner is configured to use the first  
6 mentioned and second and third color calibration targets for color registration.

1           8.     A scanner in accordance with claim 1 and further including a  
2 motor configured to move the scanning array along the scanning path, a power  
3 switch, coupled to the scanning array and the motor, for turning the scanner on  
4 and off, and logic circuitry coupled to the power switch, the scanning array, and  
5 the motor, and configured to effect movement of the scanning array to scan the  
6 calibration target in response to the scanner being turned on.

1           9.     A scanner in accordance with claim 8 wherein the logic circuitry  
2 is further configured to perform a calibration in response to scanning the first  
3 mentioned, second, and third color calibration targets.

1           10.    A method of manufacturing a scanner, the method comprising:  
2           providing a scanner including a transparent scanning window; a housing,  
3 the housing including a first side supporting the scanning window and a second  
4 side opposite the first side; a scanning array movable in the housing relative to the  
5 scanning window along a path, the scanning array facing the first side; and a light  
6 source movable with the scanning array and facing the first side in operation; and  
7           supporting a calibration target from the housing, within the scanning  
8 path, the calibration target facing the second side.

1            11. A method in accordance with claim 10 wherein the calibration  
2 target is supported inside the housing.

1            12. A method in accordance with claim 10 wherein the scanning array  
2 is color capable.

1            13. A method in accordance with claim 12 and further comprising  
2 commonly housing a monochrome printer with the scanner in the housing.

1            14. A method in accordance with claim 10 wherein supporting a  
2 calibration target comprises supporting a color target.

1            15. A method in accordance with claim 10 wherein supporting a  
2 calibration target comprises supporting a black target.

1            16. A method in accordance with claim 10 wherein supporting a target  
2 comprises supporting at least three different color calibration targets inside the  
3 housing from the first side, proximate the scanning window and within the  
4 scanning path, facing the second side, the method further comprising using the  
5 color calibration targets for color registration.

1            17. A method in accordance with claim 10 and further comprising  
2 effecting scanning of the calibration target by the scanning array in response to the  
3 scanner being powered-up.

1            18. A method in accordance with claim 17 and further comprising  
2 calibrating the scanner in response to scanning of the color calibration targets.

1 19. A multifunction device comprising:

2 a housing having a first side and a second side opposite the first side;

3 a monochrome printer supported in the housing; and

4 a color flatbed scanner supported in the housing, the scanner including,

5 a sub-housing having a first side, and a second side opposite the first side, the

6 scanner including an imaging area including a transparent surface, supported by the

7 first side of the sub-housing, a scanning array movable in the sub-housing relative

8 to the imaging area along a scanning path, the scanning array generally facing the

9 first side so as to be able to scan the imaging area, a calibration target supported

10 inside the housing from the first side, proximate the imaging area and within the

11 scanning path, the calibration target facing the second side, a motor configured to

12 move the scanning array along the scanning path, a power switch, coupled to the

13 scanning array and the motor, for turning the scanner on and off, and logic circuitry

14 coupled to the power switch, the scanning array, and the motor, and configured

15 to effect movement of the scanning array to scan the calibration target in response

16 to the scanner being turned on.

1 20. A multifunction device in accordance with claim 19 wherein the

2 logic circuitry is further configured to perform a calibration in response to scanning

3 the first mentioned, second, and third color calibration targets.